SHIPS' SAFETY BULLETIN

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Suggested routing should include CO, XO, department heads, division officers, CMC, CPO mess, petty officers' lounge, work-center supervisors, and crew's mess.
Blanks provided for initials following review:

Critical Days of Summer

By HMC (SW) Misa
Naval Safety Center

With summer approaching, leisure activities create greater risks and hazards and often lead to injuries. As a safety officer, and a supervisor, intrusive leadership is necessary to ensure the safety of our shipmates. Crewmembers must be abreast of the hazards by reinforcing safety at quarters and during safety stand-downs. Take a look at the fiscal year 2006 information available on our Naval Safety Center website:
http://www.safetycenter.navy.mil/execsummary/default.htm
to determine where prevention training is needed prior to the critical summer period (May through September).
I have listed below various mishaps since March 2006. See if you can identify causes of these crashes and where risk management could have played a vital role in preventing them.

Fatalities:

- OS3 drowned after being caught in a rip tide.
- MA3 found dead in base swimming pool.
- MM2 was involved in a recreational off-road motorcycle mishap.
- SA last seen in fast food restaurant, body recovered in water.
- SW3 drowned while snorkeling.
- LTJG was killed while participating in a motorcycle race

Injuries:

- Service member jumped off a cliff that resulted in hand and forearm injuries.
- Service member was swept up by a wave while swimming resulting in a neck injury requiring surgery.
- Service member was playing wally ball at the base gym and hit the ground with all his weight on right leg that resulted in possible tear of Achilles tendon.
- Service member started a propane grill then walked away. Member dropped the match into the burner in which gasses were built up which resulted in burns to both forearms.

OPNAVINST 5100.25A, *Navy Recreation, Athletics, and Home Safety Program*, discusses off-duty safety responsibilities. I also suggest reviewing the draft instruction, OPNAVINST

5100.25B, *Recreation and Off-Duty Safety (RODS) Program,* available on our website:
http://www.safetycenter.navy.mil/instructions/ashore/5100.25B_draft.doc
that discusses new responsibilities for notifying the chain of command in high-risk activities.

Private motor vehicle fatalities are at an all time high at 89 deaths as of 30 April 2006. This is of a great concern since we haven't reached the summer months when driving is at its peak. Based on projections, we will exceed last year's fatalities and also be the largest number within the last five-year period. We must reinforce safe driving practices daily. Take a look at these narratives from PMV fatalities and see if you can identify where proper judgment and risk management could have prevented these mishaps.
http://www.safetycenter.navy.mil/execsummary/summary/PMV.htm

- MM2 was speeding, lost control of vehicle, and was ejected.
- Vehicle driven by E3 hit head-on by vehicle which crossed median.
- MNSR drove into ditch and struck a pole.
- SN fatally injured in PMV mishap.
- QM3 killed in a motor vehicle accident while enroute to new duty station.
- MMFR ran off the road and overturned, ejecting him from the vehicle.
- MM3 struck parked car while riding motorcycle without helmet in Navy housing.
- BU1 struck vehicle that crossed into his lane of travel.
- GSEC was killed in a motorcycle mishap.
- FC3 lost control of motorcycle and struck rear of pickup.

It is evident by these stats and review of summaries that Sailors continue to drive aggressively instead of defensively. Poor judgment and lack of ORM are contributing factors to these fatalities.

We as leaders must ensure subordinates use good judgment, and ORM practices while driving motor vehicles and during off-duty activities. As part of daily quarters, we must reinforce driver safety and recreational safety to all personnel. You can download sample risk assessment tools to analyze risks associated with PMVs and off-duty activities from our website:
http://www.safetycenter.navy.mil/ashore/motorvehicle/toolbox/default.htm to assist in training crewmembers of these hazards. Since Sailors are our greatest resource, we must have mechanisms in place to protect them.

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Are Your Deck Bills Up-to-Date?

By BMCS (SW) John Upchurch
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When was the last time you reviewed your ship's bills--especially boatbills? Does the abandon-ship bill list methods of releasing lifeboats? Are boat capacities and designated lifeboats listed, along with a list of abandon-ship stations? Article 640 of OPNAVINST 3120.32C, *Standard Organization and Regulations of the U.S. Navy*, requires you include this information in your abandon-ship bill.

The boatbill also should indicate the maximum personnel-hoisting and water-borne capacities of lifeboats. Also, are all Sailors assigned as boat crewmembers qualified and officially designated as second class, or above, swimmers? Are there provisions for inspecting the wire rope for proper spooling on the cable drum before and during hoisting and lowering? Again, OPNAVINST. 5100.19D, *NAVOSH Program Manual for Forces Afloat*, and NSTM

583, *Boats and Small Craft*, both require including this information in your boat bill.

These are just some of your ship's boat bill contents you should review periodically and kept current.

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Finally a Safe Fuse-Holder-Hazard Solution

By EMCM (SW/AW) William Burkett
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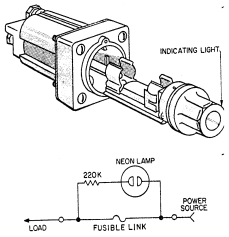
There have been problems with electricians pulling fuses from fuse holders and then reinserting the holder in the switchboard. This provides a current path of about 45 volts back to the "fuse blown" light; and, it is not de-energized properly!

Dead Front Fuse Holders

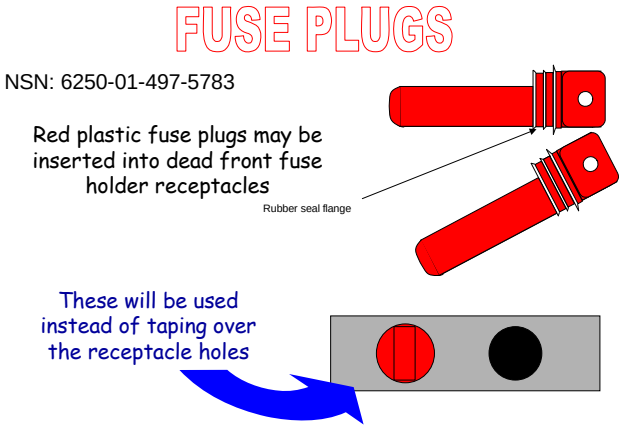
- Clear for 90 + volts
- Amber for < 90 volts
- So what?
- Current still flowing with blown fuse
- What does empty fuse holder mean?
- Can pull up to 10 amps at 480 volts but shouldn't



For years, we have put tape over the holes in the switchboard. Now there are plugs with a place to attach the red tag. The figure gives you a description of the plugs, and the NSN for ordering.

The fuse plugs are used to replace fuse holders on dead front fuse panels. You can use fuse plugs as a replacement for electrical tape when fuse holders are removed for tag outs and for systems requiring electrical isolation.

Ref: *Tagout Users Manual (TUM)* (Rev 1) Appendix F.4.A. (2).



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Fan Room Stowage

By HMC (SW) Misa
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During numerous safety surveys, I have noted many fan rooms and office spaces used for stowage. Gear adrift presents many challenges to our shipboard environment. Consider a six-month deployment in which we have to work in office space filled with personal gear. Besides the annoyance of these items to others, improperly secured items (not secured for sea) create potential hazards leading to unnecessary mishaps.

Consider how we can reduce the impact of a fire in a space if we didn't stow excess material. As a member of a hose team you may be tackling different type of fires.

Have you ever worked in space filled with annoying odors or insufficient airflow? Storage in fan rooms restricts airflow and increases the accumulation of dirt, dust, and debris in our recirculated air. If you are the petty officer

responsible for maintaining air filters, you don't want to clean out a space to accomplish this maintenance.

Section 670 of *General Specifications for the Overhaul of Surface Ships (GSO)*, lists general requirements for shipboard stowage, except liquids in tanks, weapons, and ammunition. Paragraph 510-7.2.1 of NSTM 510, *Heating, Ventilation, and Air Conditioning for Surface Ships*, states that fan rooms shall not be used for stowage. We are all responsible for providing not only a clean, but safe environment for shipmates in which to work and live. This requires us to maintain proper habitability standards.

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Authorized or Unauthorized Refrigerant Bottles

By MM1 (SW) Karlus Smith
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This is how the story goes; "CSC could you appease the crew with more slushy machines and any thing else that you can find."

CSC replies, "Yes sir, I will get right on it."

So, they go to the internet find a couple of good ones listed which would be a very nice addition to the mess decks, and keep the crew happy. Later, the slushy machine breaks down. So, who do they call? A-gang of course, the division that is responsible for repairing galley equipment.

Now the supply department has ordered a piece of machinery that needs recharging. Now wait a minute. What type of refrigerant does this machinery use? Do we carry this onboard? Is it allowed? These are questions to ask before purchasing the machines.

There are numerous types of Freon available. But ships are only authorized bottles containing 100 pounds or more. According to NSTM 516-1.10.3(n), "Do not carry throwaway (disposable) refrigerant cylinders on board Navy ships." Refrigerant storage and handling are according to NSTM 550, *Industrial Gases; Generating, Handling, and Storage*." We have found more single-use, disposable refrigerant bottles during recent surveys.

What is a disposable refrigerant bottle? Those small Freon bottles you punch a hole and throw in the trash when they are empty.

All compressed gas cylinders are to be stored in racks. Securely fasten each individual cylinder vertically (valve end up) by means such as metal collars. These bottles shown below do not meet these requirements.

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Heat Stress Management

By HMC (SW) James Misa
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In preparation for hot weather conditions, and to prevent any heat-related mishaps, ships may need to re-establish their heat stress programs onboard. A good first step toward this goal would be to reinforce the dangers of heat stress through POD notes and safety briefs. Before summer also would be an optimal time to perform ship-wide annual heat stress training to all crewmembers. You can use the video, "Play it Cool; Heat Stress Prevention Afloat," available from the Defense Audiovisual Information System website:

http://dodimagery.afis.osd.mil/davis/

to fulfill this requirement. Chapter B2 of the OPNAV 5100.19D, and Chapter3 of the *Manual for Naval Preventive Medicine (NAVMED P-5010*) are also good sources that to train crewmembers.

Along with training, institute effective control methods to assess heat conditions onboard your ship. This requires verifying that hanging, dry-bulb thermometers are properly installed at watch and workstations delineated by your ship's heat-stress instruction.

Designated heat-stress monitors probably will require refresher training. When was the last time you verified your heat-stress meters (Model RSS-220) were functioning properly? It would not be a good time to find out your equipment was out of commission or your heat monitors lacked the proper skills to perform a survey when your commanding officer requests one because of special evolutions. (e.g., drills, heavy work in progress).

During safety surveys, I have noted temperature readings are not properly logged in supply areas in accordance with article B0204b (3), and (4) of the OPNAVINST 5100.19D. Additionally, heat stress surveys were not requested in supply areas when temperature limits were met as required by article B0204c (4). I have also found heat monitoring equipment (RSS-220) was either inoperable due to battery failure or out of calibration.

Division safety petty officers and supervisors should review the references to ensure that all crewmembers are properly trained, and adhere to the guidelines to prevent heat stress. We are all responsible for ensuring a safe environment for all our Sailors. This requires us to take a proactive step in preventing and controlling heat stress onboard our ships.

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OPREP Reporting

By LCDR Joseph Mayer
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In a message to ALFLTFORCOM ATFP, COMFLTFORCOM 061322Z MAR 06 (NOTAL) provides amplifying information on incident reporting criteria contained in the revised OPNAVINST 3100.6H, Special Incident Reporting (OpRep-3, Navy Blue and Unit SitRep) procedures dated 3 FEB 06. The revised instruction introduces Talon reporting criteria to OpRep-3 Navy Blue and OpRep-3 Navy Unit SitReps dealing with specific terrorist and possible terrorist related incidents.

OPNAVINST 3100.6H changes the requirements for including COMNAVSAFECEN on OpRep-3 reports. Chapter 4, OpRep-3 Navy Blue Reports, and Chapter 5, OpRep-3 Navy Unit SitRep Report, include COMNAVSAFECEN as a required info addee for any "**incident potentially reportable as a mishap or an actual mishap**" on almost all OpRep-3 reports.

When building the OpRep-3 reporting template for your duty officers, we recommend you include us (and any other addresses you deem appropriate) on OpRep-3 reports.

OpRep-3 and personnel casualty report messages satisfy most of the notification requirements in paragraph 1005.8b of OPNAVINST 5102.1D, *Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual*. COMSUBPAC 091529Z MAR (NOTAL) readdresses the CFFC message to "SUBPAC.'

COMFLTFORCOM 101253Z MAR 06 (NOTAL) cancels COMFLTFORCOM 132106Z OCT 05 (NOTAL), Small Arms Discharge Reporting Requirements, and refers to OPNAVINST 3100.6H for small arms discharge reporting requirements.

NAVADMIN 081/06 (CNO 131719Z MAR 06) states OPNAVINST 3100.6H is effective immediately.

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Guard Against Overfusing

By EMCM (SW/AW) William Burkett
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The most common electrical discrepancy found during afloat safety surveys is overfusing of circuits. NSTM 300, *Electric Plant - General*, identifies a fuse as a safety device. You create a hazard when you overfuse a circuit. The following recommendations help prevent overfusing and prevent resulting mishaps**.**

- Purchase only approved equipment (high-speed buffers, fans, heaters, etc.) that meets shipboard circuit-design and operating or starting standards.
- Ensure you have adequate supply of fuses aboard your ship, particularly of the most common, 15-amp fuses.
- Educate those who maintain the electrical equipment about the dangers of overfusing a circuit.
- Identify, report, and repair or tag out all equipment not operating within rated-fuse capacity.
- Make sure circuits are fused properly by identifying fuse panels missing the fuse-rating or equipment label plates and by replacing the missing plates with correct fuse-data plates. (The label must indicate the circuit controlled, noun name, phase or polarity, and fuse-ampere rating).

Here are some other common fuse-panel discrepancies found are:

- Loose or missing terminal lock nuts
- Fuses installed with improper rating (wrong amperage)
- Fuses made with a non-silver ferrule (copper, nickel, or brass tips)
- Broken fuse-panel door hinges
- Grounded fuse panel
- Illegal, piggyback circuits (you should have only one piece of equipment per fuse)

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PRACTICE SAFETY AWARENESS

By HMC (SW) James Misa
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During a mishap investigation isn't the appropriate time to find out that proper procedures aren't in place that may have prevented an injury from occurring. If you, as the supervisor take the time to observe daily workplace practices, you can prevent poor working practices and conditions that may have caused or contributed to the mishap.

During safety surveys, I have noted many instances of unsafe practices that lead to injuries. I have seen many Sailors changing light bulbs without ladders, people painting without wearing eye protection, and I have seen people working over the side without the appropriate fall-protection equipment.

After reading recent mishap summaries of Sailor injuries, I believe we need to reemphasize the process of operational risk management (ORM). It may require commands to develop ORM scenarios to reinforce safety during various evolutions and common tasks. Check out best practices on our website:

http://www.safetycenter.navy.mil/bestpractices/default.htm to see what other commands are doing in safety and sample ORM resources you can tailor to your command.

As a supervisor, when is the last time you got out into spaces to observe the work practices of your Sailors? Did you observe any unsafe practices such as improper tagout procedures, improper PPE being worn? What did you do when you saw the violations?

If you see hazardous conditions during walkthroughs, it may be an indication that you need to pay more attention to work practices in your respective areas. Your personnel may require additional safety training.

When was the last time you actually inspected your spaces for hazards and used the internal mishap reporting form (OPNAV 3120/5) to document the hazard and report it to the safety office? Article A0307 of the OPNAVINST 5100.19D specifies the requirement for hazard reporting by crewmembers. Use COMNAVSURFORINST 3120.1, *Zone Inspection*, as a guide in the inspection of spaces. Paragraph A0303a of OPNAVINST 5100.19D provides requirements for routine inspections of spaces.

As we all know, in the Navy most of maintenance items are covered by PMS. Have you ever done PMS spot checks on those items listed as situational maintenance (R checks) or those that pertain to safety devices? Are your personnel fully aware of safety-related items included on the MRC?

Our surveyors frequently find safety devices out of calibration or inoperable without any jobs listed in the CSMP. Required safety items, such personal protective equipment, are not used. More frequent spot-checks of safety-related items may prevent this from occurring.

It is the responsibility of all hands to promote a workplace free of hazards that requires all Sailors to practice risk management on, and off, duty. When we are expected to do more with less, we can't afford to lose our Sailors due to injuries. As supervisor we must instill a culture toward, "Safety First."

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Clearing Barrel Safety

By GMC (SW) Charles Robinson
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What are your procedures for loading and unloading small arms at your clearing barrels? Are your watch-standers supervised when they perform these procedures? We have received various answers from throughout the fleet to these two questions.

However, *Navy Tactical Reference Publication (NTRP)* 3-07.2.2, *Force Protection Weapons Handling Standard Procedures And Guidelines*, has the correct answer to the questions. It has a wealth of information about force-protection small arms; and, it covers service pistols, shotguns, rifles, grenade launchers, machine guns, grenade machine guns, and two types of non-lethal weapons: the riot baton and oleoresin capsicum spray. The NTRP also provides usage, maintenance, and handling procedures for these weapons, whether they're employed on the shooting range or on watch.

Chapter 1 has general guard-mount and clearing barrel procedures. These require a supervisor to read aloud each procedural step and verify compliance each time someone loads or prepares to unload a weapon. The Sailor actually loading or clearing the weapon must repeat each of the supervisor's orders. Different chapters provide clearing-barrel procedures for different force protection weapons.

People do make mistakes. It is part of the Navy's daily world-wide routine to have armed watch-standers load and unload their weapons during turnover. Most watch-standers have done it many times without incident. However, carelessness or less than 100 percent compliance with loading and unloading procedures invite disaster.

We also become complacent when we get overly confident of our abilities to handle weapons. We then lose our respect for them and set the stage for a mishap. In other situations, even the most conscientious Sailor loses his edge and makes mistakes when tired. Strict adherence to procedures and close supervision are our protection from deadly blunders.

If you don't have NRTP 3-07.2.2, see your command NWP librarian to get one. When you get it, post the procedures and make sure all supervisors maintain strict formality during any weapon-turnover process. Constant monitoring and reminders keep safety standards high. While inconvenient, they're preferable to ending up with a shipmate killed during a weapons mishap. Save the bullets for the bad guys.

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NAVOSH Training Quotas

By HMC (SW) Misa
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Interested in obtaining quotas for a particular training course held at the NAVOSH and Environmental Training Center. As of 26 February 2006, all students who require course quotas must obtain them from Enterprise Navy Training Reservation System (eNTRS) via the website:

https://entrs.chamb.disa.mil/login_page_main.jsp.

You must have a valid CAC to access the site and you will have to request access on your first visit.

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